Claims

1   1.   A method comprising:

2   generating a cipher stream based on a first key for encrypted streamed

3   content;

4   generating a second cipher stream based on a second key to re-encrypt the

5   streamed content;

6   receiving the encrypted streamed content;

7   simultaneously decrypting and re-encrypting the encrypted content using a

8   combination of the first and the second cipher streams;

9   conveying the re-encrypted content to a sink.

1   2.   The method of Claim 1, wherein simultaneously decrypting and re-

2   encrypting the encrypted streamed content comprises exclusive OR-ing the encrypted

3   streamed content with the cipher stream combination.

1   3.   The method of Claim 1, wherein the cipher stream combination comprises

2   a result of exclusive OR-ing the first and second cipher streams.

1   4.   The method of Claim 3, wherein the first key and the second key have

2   symmetric agreement.

1   5.   The method of Claim 1, further comprising receiving one or more of the

2   first key and the second key over a secure authenticated channel.

1   6.   The method of Claim 5, wherein receiving a key over a secure

2   authenticated channel comprises receiving the key from a sales server.

1   7.   The method of Claim 5, wherein the secure authenticated channel

2   comprises an Internet connection.

1   8.   The method of Claim 5, wherein the secure authenticated channel

2   comprises a telephone line.

1   9.   The method of Claim 1, further comprising conveying the second key to

2   the sink to enable the sink to decrypt the re-encrypted content.

1   10.   The method of Claim 1, wherein the encrypted streamed content is

2   publicly available and encrypted with a public key and wherein the first key is a locally

3   available private key.

1   11.   The method of Claim 1, wherein the encrypted content is a broadcasted

2   entertainment program.

1   12.   A machine-readable medium having stored thereon data representing

2   sequences of instructions which, when executed by a machine, cause the machine to

3   perform operations comprising:

4   generating a cipher stream based on a first key for encrypted streamed

5   content;

6   generating a second cipher stream based on a second key to re-encrypt the

7   streamed content;

8   receiving the encrypted streamed content;

9   simultaneously decrypting and re-encrypting the encrypted content using a

10   combination of the first and the second cipher streams;

11   conveying the re-encrypted content to a sink.

1   13.   The medium of Claim 12, wherein the instructions for simultaneously

2   decrypting and re-encrypting the encrypted streamed content comprise instructions

3   which, when executed by the machine, cause the machine to perform further operations

4   comprising exclusive OR-ing the encrypted streamed content with the cipher stream

5   combination.

1   14.   The medium of Claim 12, wherein the cipher stream combination

2   comprises a result of exclusive OR-ing the first and second cipher streams.

1   15.   The medium of Claim 12, wherein the first key and the second key have

2   symmetric agreement.

1   16.   The medium of Claim 12, further comprising instructions which, when

2   executed by the machine, cause the machine to perform further operations comprising

3   receiving one or more of the first key and the second key over a secure authenticated

4   channel.

1   17.   An apparatus comprising:

2   a content interface to receive encrypted streamed content;

3   a computing device to generate a cipher stream based on a first key for

4   encrypted streamed content, to generate a second cipher stream based on a second key to

5   encrypt streamed content and to simultaneously decrypt and re-encrypt the received

6   encrypted streamed content using a combination of the first and the second cipher

7   streams; and

8   a sink interface to convey the re-encrypted content to a sink.

1   18.   The apparatus of Claim 17, further comprising a secure authenticated

2   channel interface to receive one of either the first key or the second key.

1   19.   The apparatus of Claim 17, wherein the first key and the second key have

2   symmetric agreement and wherein the combination of the first and the second cipher

3   streams is a result of exclusive OR-ing the encrypted content stream with an encryption

4   stream.

1   20.   The apparatus of Claim 17, wherein the computing device conveys the

2   second key to the sink to enable the sink to decrypt the re-encrypted content.

1   21.   The apparatus of Claim 17, wherein the computing device includes a

2   broadcast entertainment set-top box.